```
=> d que stat l13
L1         29816 SEA FILE=HCAPLUS ABB=ON  ?APOLIPOPROTEIN? OR ?APOE?
L2          1399 SEA FILE=HCAPLUS ABB=ON  L1 AND (?DRUG?(W)?DELIVER? OR
                 ?CARRIER?)
L3           197 SEA FILE=HCAPLUS ABB=ON  L2 AND (?PHOSPHATIDYLCHOLIN? OR
                 ?PHOSPHOLIPID?)
L5             1 SEA FILE=REGISTRY ABB=ON  CHOLESTEROL/CN
L6           143 SEA FILE=HCAPLUS ABB=ON  L3 AND (L5 OR ?CHOLESTEROL?)
L7            77 SEA FILE=HCAPLUS ABB=ON  L6 AND (?DRUG? OR ?PHARM? OR ?ANTIBIOT
                 IC? OR ?THERAP?)
L9            76 SEA FILE=HCAPLUS ABB=ON  L7 AND ?ESTER?
L10           25 SEA FILE=HCAPLUS ABB=ON  L9 AND LDL
L11           76 SEA FILE=HCAPLUS ABB=ON  L9 OR L10
L12           67 SEA FILE=HCAPLUS ABB=ON  L11 AND (PRD<20021203 OR PD<20021203)
L13           23 SEA FILE=HCAPLUS ABB=ON  L12 AND LDL

=> d ibib abs l13 1-23

L13  ANSWER 1 OF 23  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2004:430718  HCAPLUS
DOCUMENT NUMBER:          141:1254
TITLE:                    Synthetic single domain polypeptides mimicking
                          apolipoprotein E that enhance low and very low
                          density lipoprotein uptake, reduce serum
                          cholesterol and reduce risk of cardiovascular
                          disease
INVENTOR(S):              Anantharamiah, Gattadahalli M.; Garber, David W.;
                          Datta, Geeta
PATENT ASSIGNEE(S):       The UAB Research Foundation, USA
SOURCE:                   PCT Int. Appl., 79 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2004043403         A2    20040527    WO 2003-US36268         20031113 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2004186057         A1    20040923    US 2003-712447          20031113 <--
PRIORITY APPLN. INFO.:                       US 2002-425821P      P  20021113 <--
OTHER SOURCE(S):          MARPAT 141:1254
AB   The present invention provides novel synthetic apolipoprotein E
     (ApoE)-mimicking peptides wherein the receptor binding domain of
     ApoE is covalently linked to 18L, the well characterized
     lipid-associating model class L amphipathic helical peptide. Such peptides
     enhance low d. lipoprotein (LDL) and very low d. lipoprotein
     (VLDL) binding to and degradation by fibroblast or HepG2 cells. Also provided
     are possible applications of the synthetic peptides in lowering human
     plasma LDL cholesterol levels, thus inhibiting
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atherosclerosis or cardiovascular diseases.

L13 ANSWER 2 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:355085 HCAPLUS
DOCUMENT NUMBER: 140:369944
TITLE: Human tissue-specific housekeeping genes identified by expression profiling
INVENTOR(S): Aburatani, Hiroyuki; Yamamoto, Shogo
PATENT ASSIGNEE(S): NGK Insulators, Ltd., Japan
SOURCE: PCT Int. Appl., 372 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035785	A1	20040429	WO 2002-JP10753	20021016
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004229233	A1	20041118	US 2003-684422	20031015 <--
PRIORITY APPLN. INFO.:			US 2002-418614P P	20021016 <--
			WO 2002-JP10753 W	20021016 <--

AB Housekeeping genes commonly expressed in 35 different human tissues, oligonucleotide probes and DNA microarrays containing them, are disclosed.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:532467 HCAPLUS
DOCUMENT NUMBER: 139:100247
TITLE: Improved edible compositions containing protein hydrolyzate and plant sterol for improving serum lipid profile and preventing atherosclerosis
INVENTOR(S): Wester, Ingmar; Kuusisto, Paeivi
PATENT ASSIGNEE(S): Raisio Benecol Oy, Finland
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055324	A1	20030710	WO 2002-FI1053	20021220 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,				

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1455588 A1 20040915 EP 2002-788015 20021220 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRIORITY APPLN. INFO.: FI 2001-2553 A 20011221 <--
WO 2002-FI1053 W 20021220

AB A **therapeutic** composition comprising a protein hydrolyzate and a plant sterol in the weight ratio of (0.02-150):1, and optionally also an emulsifier, a fat, and(or) mineral salt, can be used in a **pharmaceutical**, nutraceutical, or food product for improving serum lipid profile. Thus, a protein hydrolyzate/emulsifier complex was prepared by dispersing 62 g lysolecithin in water, adding 500 g soy protein hydrolyzate, mixing (10,000 rpm), and freeze-drying and grinding the mixture Using only a small amount of plant sterols (stanol fatty acid **ester**, 0.5% as sterol equivalent) in feed containing the protein hydrolyzate had a strong synergistic triglyceride-lowering effect in **LDL** receptor-deficient female mice. The combination of plant sterols and protein hydrolyzate/emulsifier complex also had enhanced **cholesterol**-lowering effect compared to the plant sterols or protein hydrolyzate/emulsifier complex alone and compared to what was expected for the combination.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:5715 HCAPLUS
DOCUMENT NUMBER: 138:61289
TITLE: Truncated **apolipoprotein** B-containing lipoprotein particles for delivery of components to tissues or cells
INVENTOR(S): Shelness, Gregory
PATENT ASSIGNEE(S): Wake Forest University, USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003000184	A2	20030103	WO 2002-US19512	20020620 <--
WO 2003000184	A3	20030717		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003008014 A1 20030109 US 2001-885894 20010620

PRIORITY APPLN. INFO.: US 2001-885894 A 20010620 <--

AB A lipoprotein compound delivery particle comprises: (a) a lipophilic or

amphipathic compound to be delivered (e.g. paclitaxel); (b) at least one polar lipid (this ingredient being optional when the lipophilic or amphipathic compound serves itself as a polar lipid); (c) optionally, at least one neutral lipid; and (d) a truncated **apolipoprotein** B (apoB) protein having a deleted **LDL** receptor-binding region. Conjugates useful for making such particles, **pharmaceutical** formulations containing such particles, and methods of using such particles are also described.

L13 ANSWER 5 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:676038 HCAPLUS
DOCUMENT NUMBER: 137:210959
TITLE: Plasma **phospholipid** transfer protein (PLTP) deficiency represents an anti-atherogenic state and PLTP inhibitor has anti-atherosclerosis action
INVENTOR(S): Jiang, Xian-Cheng; Tall, Alan R.
PATENT ASSIGNEE(S): The Trustees of Columbia University in the City of New York, USA
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068450	A2	20020906	WO 2002-US5694	20020222 <--
WO 2002068450	A3	20030410		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002142280	A1	20021003	US 2001-792448	20010223 <--
EP 1373555	A2	20040102	EP 2002-713684	20020222 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2001-792448 A 20010223 <--
WO 2002-US5694 W 20020222 <--

AB This invention provides methods of decreasing **apolipoprotein** B-containing lipoprotein and of treating atherosclerotic diseases and dyslipidemic diseases by reducing plasma **phospholipid** transfer protein activity, and methods of identifying chemical compds. for use in such treatments.

L13 ANSWER 6 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:616213 HCAPLUS
DOCUMENT NUMBER: 137:174937
TITLE: Liposomal compositions for mobilizing peripheral **cholesterol** in treatment of dislipidemias
INVENTOR(S): Rodrigueza, Wendi V.; Williams, Kevin Jon; Hope, Michael J.
PATENT ASSIGNEE(S): Esperion LUV Development, Inc., USA; The University of British Columbia

SOURCE: U.S. Pat. Appl. Publ., 83 pp., Cont.-in-part of U.S. 6,312,719.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002110587	A1	20020815	US 2001-924222	20010807 <--
US 6773719	B2	20040810		
US 2001038845	A1	20011108	US 1998-60715	19980415 <--
US 2002064553	A1	20020530	US 1998-164101	19980930 <--
US 6139871	A	20001031	US 1998-175553	19981020 <--
US 6312719	B1	20011106	US 1999-322336	19990528 <--
US 2002022053	A1	20020221	US 2001-790232	20010221 <--
US 2002110588	A1	20020815	US 2001-992107	20011105 <--
US 2002071862	A1	20020613	US 2002-61503	20020131 <--
US 2004224011	A1	20041111	US 2004-861979	20040604 <--

PRIORITY APPLN. INFO.:

US 1994-206415	B1	19940304 <--
US 1995-507170	B1	19950726 <--
US 1995-5090P	P	19951011 <--
US 1996-728766	A3	19961011 <--
US 1998-71974	A1	19980504 <--
US 1998-175553	A1	19981020 <--
US 1999-322336	A2	19990528 <--
US 1996-729449	B3	19961011 <--
US 1998-60642	A1	19980415 <--
US 1998-60644	B3	19980415 <--
US 2001-924222	A1	20010807 <--

AB The present invention provides a liposomal composition for treating dislipidemias in human subjects, a method of using a liposomal composition, devices and modes of operation of the devices and of the compns., and kits related thereto. The invention provides for the reverse transport of **cholesterol** from peripheral tissues to the liver in a warm blood mammal while controlling plasma atherogenic lipoprotein concns., including **LDL** concns. A method described above and mode of operation of the devices includes the step of administering an effective amount of a multiplicity of acceptors comprised of **phospholipids** substantially free of sterol. A method optionally includes the step of periodically assaying atherogenic lipoprotein concns. with an assay during the treatment period to assess atherogenic lipoprotein concns. and obtain an atherogenic lipoprotein profile, and adjusting the administration in response to the profile. The large liposomes are dimensioned larger than fenestrations of an endothelial layer lining hepatic sinusoids in the liver so that the liposomes are too large to readily penetrate the fenestrations of one variant. The **therapeutically** effective amts. are in the range of about 10-1600 mg **phospholipid** per kg body weight per dose. A **pharmaceutical** composition and related kit for mobilizing peripheral **cholesterol** and sphingomyelin that enters the liver of a subject consisting essentially of liposomes of a size and shape larger than fenestrations of an endothelial layer lining hepatic sinusoids in the liver is also provided. The invention also provides for control of **cholesterol** related genes and other compds. The present invention also provides compns. and methods for treating atherosclerosis. In one embodiment, the compns. comprise unilamellar liposomes having an average diameter of 100-150 nm. Methods for treating atherosclerosis employing the compns. of the present invention are also provided. For example, liposomes having a mean diameter of about 125 nm were

found to be the most effective in mobilizing **cholesterol** in vivo. Liquid-crystalline liposomes were more effective in mobilizing **cholesterol** than gel-state liposomes.

REFERENCE COUNT: 189 THERE ARE 189 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:408469 HCAPLUS
DOCUMENT NUMBER: 136:395962
TITLE: Methods employing and compositions containing defined oxidized **phospholipids** for prevention and treatment of atherosclerosis
INVENTOR(S): Harats, Dror; George, Jacob; Halperin, Gideon
PATENT ASSIGNEE(S): Cardimmune Ltd., Israel; Vascular Biogenics Ltd.
SOURCE: PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
WO 2002041827	A2	20020530	WO 2001-IL1080		20011122	<--
WO 2002041827	A3	20021010				
WO 2002041827	C2	20030530				
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW						
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG						
CA 2429817	AA	20020530	CA 2001-2429817		20011122	<--
AU 2002018461	A5	20020603	AU 2002-18461		20011122	<--
EP 1341543	A2	20030910	EP 2001-997274		20011122	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR						
JP 2004537498	T2	20041216	JP 2002-544008		20011122	<--
US 2003225035	A1	20031204	US 2003-445347		20030527	<--
US 6838452	B2	20050104				
US 2004106677	A1	20040603	US 2003-718596		20031124	<--
PRIORITY APPLN. INFO.:			US 2000-252574P	P	20001124	<--
			WO 2001-IL1080	W	20011122	<--
			US 2003-445347	A3	20030527	

OTHER SOURCE(S): MARPAT 136:395962

AB Novel synthetic forms of etherified oxidized **phospholipids** and methods of utilizing same for preventing and treating atherosclerosis and other related disorders, such as cardiovascular disease, cerebrovascular disease, peripheral vascular disease, stenosis, restenosis, etc., are provided. For example, an effective inhibition of late stage atherogenesis was observed in genetically predisposed (**apoE** -deficient) mice following protracted oral exposure to moderate doses (1 mg/mouse) of synthetic oxidized **LDL** components, hexadecyl-2-(5'-oxopentanyl)-sn-glycerophosphocholine (ALLE) and 1-hexadecanoyl-2-(5'-oxo)pentanoyl-sn-3-glycerophosphocholine (POVPC)

(preparation given), compared to PBS-fed control mice. Induction of oral tolerance had no significant effect on other parameters measured, such as weight gain, total triglyceride or **cholesterol** blood levels. Surprisingly, it was observed that the inhibition of atherogenesis by these oxidized **LDL** analogs was accompanied by a significant reduction in VLDL **cholesterol** and triglycerides.

L13 ANSWER 8 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:356025 HCAPLUS
DOCUMENT NUMBER: 138:16513
TITLE: Cell association of liposomes with high fluid anionic **phospholipid** content is mediated specifically by **LDL** and its receptor, LDLr
AUTHOR(S): Amin, Ketan; Wasan, Kishor M.; Albrecht, Ralph M.; Heath, Timothy D.
CORPORATE SOURCE: Department of Pharmaceutics, School of Pharmacy, University of Wisconsin-Madison, Madison, WI, 53705-2222, USA
SOURCE: Journal of Pharmaceutical Sciences (**2002**), 91(5), 1233-1244
CODEN: JPMSAE; ISSN: 0022-3549
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We have sought to confirm indications in our recent studies suggesting that association of liposomes composed of 75-100 mol % egg phosphatidylglycerol (ePG), a fluid anionic **phospholipid**, with cells is mediated by low d. lipoprotein (**LDL**) and the classical **LDL** receptor (LDLr). In the present study, binding of liposomes composed of 75-100 mol % ePG to CV1-P cells, either in serum-supplemented medium or in defined medium supplemented with **LDL**, is blocked by the presence of either of two monoclonal antibodies. The first is Ig (Ig)G C7, an antibody specific for LDLr. The second is IgG 5E11, an antibody specific for domain 3441-3569 of **apolipoprotein** B100. CHOldlA7, a cell line known to lack the LDLr and previously shown by us to associate minimally with 75-100 mol % ePG liposomes, was transfected with the human LDLr. The transfected cells bound 75-100 mol % ePG liposomes at high levels, and this binding was blocked by IgG C7. Previously, we have shown that serum, but not **LDL** or high d. lipoprotein, induces association of 25-50 mol % ePG liposomes with both CV1-P and CHO wild type cells, but not CHOldlA7. In the present study, IgG C7 does not block this interaction, and transfected CHOldlA7 cells do not show this interaction. Hence, this form of liposome binding appears not to involve **LDL** or LDLr, but requires a receptor, currently unknown, and a serum component other than **LDL** or high d. lipoprotein. The unknown receptor, in addition to LDLr, is missing from CHOldlA7.
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:489727 HCAPLUS
DOCUMENT NUMBER: 135:51023
TITLE: Extraction of biological components from body fluids
INVENTOR(S): Boos, Karl-siegfried; Seidel, Dietrich
PATENT ASSIGNEE(S): Sebo G.m.b.H., Germany
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001048476	A2	20010705	WO 2000-EP13294		20001227 <--
WO 2001048476	A3	20020214			
W: JP, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR					
DE 19963420	A1	20010712	DE 1999-19963420		19991228 <--
EP 1242825	A2	20020925	EP 2000-992093		20001227 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR					
US 2003080056	A1	20030501	US 2002-168533		20021022 <--
PRIORITY APPLN. INFO.:			DE 1999-19963420	A	19991228 <--
			WO 2000-EP13294	W	20001227 <--

AB The invention relates to a method for extraction of biol. components from body fluids, in particular from blood, plasma or serum. The biol. components are extracted in native and biol. active form and can, for example, be used for **therapeutic** purposes, as well as for the production of control samples or stds. for diagnostic tests. Plasma lipoproteins, HDL, **LDL**, VLDL, antibodies, hormones etc. are removed during apheresis, H.E.L.P. **therapy** (heparin-induced extracorporeal **LDL** elimination).

L13 ANSWER 10 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:824085 HCAPLUS
DOCUMENT NUMBER: 134:9357
TITLE: Method of treating angina and/or anginal equivalents using **phospholipid** liposomes
INVENTOR(S): Goldberg, Dennis I.; Williams, Kevin Jon
PATENT ASSIGNEE(S): Talaria Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 142 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000069412	A1	20001123	WO 2000-US12962		20000512 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2373681	AA	20001123	CA 2000-2373681		20000512 <--
EP 1183011	A1	20020306	EP 2000-932314		20000512 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
JP 2003508349	T2	20030304	JP 2000-617871		20000512 <--
AU 773385	B2	20040527	AU 2000-50053		20000512 <--
PRIORITY APPLN. INFO.:			US 1999-134140P	P	19990514 <--
			WO 2000-US12962	W	20000512 <--

AB The present invention provides a method of treating angina, e.g., stable

angina, unstable angina and variant angina, and/or an anginal equivalent comprising administering a **therapeutically** effective amount of a multiplicity of liposomes, and preferably, large liposomes comprised of **phospholipids** substantially free of sterol to a subject for a treatment period. The method also includes administering an effective amount of an antianginal **drug** other than the liposomes. The invention also provides a method of treating claudication comprising administering a **therapeutically** effective amount of liposomes. In yet another variant, the invention provides a method of perioperative and/or pre-operative conditioning of a subject comprising administering liposomes. Several other inventions are also described herein. An antianginal **drug** is selected from the group consisting a nitrate, a beta blocker, a calcium channel antagonist, a coronary vasodilator, a lipid lowering **drug**, an afterload reducing agent, an inotropic agent, a pre-load reducing agent, and an opiate.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:795994 HCAPLUS
DOCUMENT NUMBER: 132:31744
TITLE: Gene probes used for genetic profiling in healthcare screening and planning
INVENTOR(S): Roberts, Gareth Wyn
PATENT ASSIGNEE(S): Genostic Pharma Ltd., UK
SOURCE: PCT Int. Appl., 745 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964627	A2	19991216	WO 1999-GB1780	19990604 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:			
GB 1998-12099	A	19980606 <--
GB 1998-13291	A	19980620 <--
GB 1998-13611	A	19980624 <--
GB 1998-13835	A	19980627 <--
GB 1998-14110	A	19980701 <--
GB 1998-14580	A	19980707 <--
GB 1998-15438	A	19980716 <--
GB 1998-15574	A	19980718 <--
GB 1998-15576	A	19980718 <--
GB 1998-16085	A	19980724 <--
GB 1998-16086	A	19980724 <--
GB 1998-16921	A	19980805 <--
GB 1998-17097	A	19980807 <--
GB 1998-17200	A	19980808 <--
GB 1998-17632	A	19980814 <--
GB 1998-17943	A	19980819 <--

AB There is considerable evidence that significant factor underlying the individual variability in response to disease, **therapy** and prognosis lies in a person's genetic make-up. There have been numerous examples relating that polymorphisms within a given gene can alter the functionality of the protein encoded by that gene thus leading to a variable physiol. response. In order to bring about the integration of genomics into medical practice and enable design and building of a technol. platform which will enable the everyday practice of mol. medicine a way must be invented for the DNA sequence data to be aligned with the identification of genes central to the induction, development, progression and outcome of disease or physiol. states of interest. According to the invention, the number of genes and their configurations (mutations and polymorphisms) needed to be identified in order to provide critical clin. information concerning individual prognosis is considerably less than the 100,000 thought to comprise the human genome. The identification of the identity of the core group of genes enables the invention of a design for genetic profiling technologies which comprises of the identification of the core group of genes and their sequence variants required to provide a broad base of clin. prognostic information - "genostics". The "Genostic" profiling of patients and persons will radically enhance the ability of clinicians, healthcare professionals and other parties to plan and manage healthcare provision and the targeting of appropriate healthcare resources to those deemed most in need. The use of this invention could also lead to a host of new applications for such profiling technologies, such as identification of persons with particular work or environment related risk, selection of applicants for employment, training or specific opportunities or for the enhancing of the planning and organization of health services, education services and social services.

L13 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:795993 HCAPLUS
DOCUMENT NUMBER: 132:31743
TITLE: Gene probes used for genetic profiling in healthcare screening and planning
INVENTOR(S): Roberts, Gareth Wyn
PATENT ASSIGNEE(S): Genostic Pharma Limited, UK
SOURCE: PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964626	A2	19991216	WO 1999-GB1779	19990604 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2330929	AA	19991216	CA 1999-2330929	19990604 <--
AU 9941586	A1	19991230	AU 1999-41586	19990604 <--
AU 766544	B2	20031016		
AU 9941587	A1	19991230	AU 1999-41587	19990604 <--
GB 2339200	A1	20000119	GB 1999-12914	19990604 <--

GB 2339200	B2	20010912			
EP 1084273	A1	20010321	EP 1999-925207		19990604 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2003528564	T2	20030930	JP 2000-553616		19990604 <--
US 2003198970	A1	20031023	US 2002-206568		20020729 <--
PRIORITY APPLN. INFO.:			GB 1998-12098	A	19980606 <--
			GB 1998-28289	A	19981223 <--
			GB 1998-16086	A	19980724 <--
			GB 1998-16921	A	19980805 <--
			GB 1998-17097	A	19980807 <--
			GB 1998-17200	A	19980808 <--
			GB 1998-17632	A	19980814 <--
			GB 1998-17943	A	19980819 <--
			US 1999-325123	B1	19990603 <--
			WO 1999-GB1779	W	19990604 <--

AB There is considerable evidence that significant factor underlying the individual variability in response to disease, **therapy** and prognosis lies in a person's genetic make-up. There have been numerous examples relating that polymorphisms within a given gene can alter the functionality of the protein encoded by that gene thus leading to a variable physiol. response. In order to bring about the integration of genomics into medical practice and enable design and building of a technol. platform which will enable the everyday practice of mol. medicine a way must be invented for the DNA sequence data to be aligned with the identification of genes central to the induction, development, progression and outcome of disease or physiol. states of interest. According to the invention, the number of genes and their configurations (mutations and polymorphisms) needed to be identified in order to provide critical clin. information concerning individual prognosis is considerably less than the 100,000 thought to comprise the human genome. The identification of the identity of the core group of genes enables the invention of a design for genetic profiling technologies.

L13 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1999:272901 HCAPLUS
DOCUMENT NUMBER:	131:97247
TITLE:	Niacin accelerates intracellular apoB degradation by inhibiting triacylglycerol synthesis in human hepatoblastoma (HepG2) cells
AUTHOR(S):	Jin, Fu-You; Kamanna, Vaijinath S.; Kashyap, Moti L.
CORPORATE SOURCE:	Cholesterol Center, Medical Service Department of Veterans Affairs Medical Center, Long Beach, CA, 90822, USA
SOURCE:	Arteriosclerosis, Thrombosis, and Vascular Biology (**1999**), 19(4), 1051-1059 CODEN: ATVBFA; ISSN: 1079-5642
PUBLISHER:	Lippincott Williams & Wilkins
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB The mechanism by which the potent **drug** niacin decreases apoB-containing atherogenic lipoproteins and prevents coronary disease is unclear. Utilizing human hepatoblastoma (HepG2) cells as an in vitro model, we have examined the effect of niacin on intracellular degradation of apoB and the regulatory mechanisms involved in apoB processing. Niacin significantly increased apoB degradation in a dose- and time-dependent manner. Treatment of HepG2 cells with calpain inhibitor I [N-acetyl-leucyl-leucyl-norleucinal (ALLN), an inhibitor of certain protease-mediated apoB degradation], did not alter niacin-induced apoB degradation Niacin decreased inhibition of oleate-mediated apoB degradation Niacin dose-dependently

inhibited the synthesis of both fatty acids and triacylglycerol (TG) by 20% to 40% as determined by the incorporation of 14C-acetate and 3H-glycerol into fatty acids and TG, resp. Incubation of HepG2 cells with niacin significantly inhibited (by 12% to 15%) fatty acid **esterification** to produce TG as assessed by the incorporation of 3H-oleic acid into TG. 14C-acetate incorporation into **cholesterol** and **phospholipids** was unchanged. The activity of microsomal triglyceride transfer protein (MTP), a **carrier** protein for lipids, was not altered by pretreatment of cells with niacin. ApoB mRNA expression and 125I-**LDL** protein uptake were also unchanged. These data indicate that niacin accelerates hepatic intracellular post-translational degradation of apoB by selectively reducing triglyceride synthesis (through inhibiting both fatty acid synthesis and fatty acid **esterification** to produce TG) without affecting ALLN-inhibitable protease- or MTP-mediated intracellular apoB processing, resulting in decreased apoB secretion and hence lower circulating levels of the atherogenic lipoproteins.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:184154 HCAPLUS
DOCUMENT NUMBER: 130:218310
TITLE: Scavenger receptor BI (SR-BI) antagonists and use thereof as contraceptives and in the treatment of steroidal overproduction
INVENTOR(S): Krieger, Monty
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
WO 9911288	A1	19990311	WO 1998-US18463		19980904	<--
W: CA, JP						
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE						
CA 2302403	AA	19990311	CA 1998-2302403		19980904	<--
EP 1007091	A1	20000614	EP 1998-943545		19980904	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI						
US 2002099040	A1	20020725	US 1998-148012		19980904	<--
US 2004077526	A1	20040422	US 2003-706073		20031112	<--
PRIORITY APPLN. INFO.:			US 1997-57943P	P	19970905	<--
			US 1998-148012	A1	19980904	<--
			WO 1998-US18463	W	19980904	<--

AB SR-BI is present on the membranes of hepatocytes and steroidogenic tissues, including the adrenal gland, testes, and ovaries, where it mediates the uptake and transport of **cholesteryl ester** from high d. lipoproteins. It has been demonstrated that transgenic animals which do not produce SR-BI are perfectly healthy, with the exception that the females are infertile. This provides evidence that inhibition of uptake, binding or transport of **cholesteryl ester** to SR-BI can be used to inhibit pregnancy. The same pathway can also be used to decrease production of steroids, and therefore be used as a **therapy** for disorders involving steroidal overprodn.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:44998 HCAPLUS
DOCUMENT NUMBER: 130:115009
TITLE: Method of suppressing a rise in **LDL** concentrations after administration of an agent having small acceptors
INVENTOR(S): Williams, Kevin Jon
PATENT ASSIGNEE(S): Talaria Therapeutics, Inc., USA
SOURCE: U.S., 43 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5858400	A	19990112	US 1996-731257	19961011 <--
PRIORITY APPLN. INFO.:			US 1996-731257	19961011 <--

AB The present invention provides compns. for, a method of suppressing the rise in plasma concns. of atherogenic lipoproteins after administration of an agent having small acceptors of **cholesterol**, other lipids or compds. The method includes the step of co-administering an effective amount of a multiplicity of an agent having large liposomes that include **phospholipids** substantially free of sterol with the administration of the agent having the small acceptors. The atherogenic lipoproteins include **LDL**, VLDL, IDL, β-VLDL, Lp(a), a lipoprotein containing **apolipoprotein**-B, oxidized lipoproteins, and modified lipoproteins. The agent having small acceptors consists essentially of small acceptors and in which the agent having large liposomes consists essentially of large liposomes.. In a variant, co-administration of the agent having large liposomes is simultaneous with the administration of the agent having small acceptors. Optionally, co-administration of the agent having large liposomes is separated in time from the administration of the agent having small acceptors by an effective time period. An improved **pharmaceutical** composition for reducing the size of arterial lesions that enters the liver of a subject is also provided; the improvement comprises an anti-oxidant and derivs. thereof. The invention also provides an improved mode of operation of liposomes utilizing the improvements described herein.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:214294 HCAPLUS
DOCUMENT NUMBER: 128:286343
TITLE: Method of regulating **cholesterol**-related genes, enzymes and other compounds, and **pharmaceutical** compositions
INVENTOR(S): Williams, Kevin Jon
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 43 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5736157	A	19980407	US 1996-728697	19961011 <--
US 5948435	A	19990907	US 1997-850921	19970502 <--
PRIORITY APPLN. INFO.:			US 1996-728697 A3	19961011 <--

AB A method of regulating **cholesterol**-related genes, enzymes and other compds., **pharmaceutical** compns. and a kit related thereto are provided. Exemplary genes that are regulated include a gene for an **LDL** receptor, a gene for HMG-CoA reductase, a gene for **cholesterol** 7-alpha-hydroxylase, and a gene regulating a function involved in **cholesterol** homeostasis. The method comprises the step of parenterally administering a **therapeutically** effective amount of a lipid acceptor. The lipid acceptor in one variant includes a multiplicity of large liposomes comprised of **phospholipids** substantially free of sterol during a treatment period. The method includes the steps of periodically assaying plasma **LDL** concns. with an assay during a period of time to assess said plasma **LDL** and to obtain an **LDL** profile, and adjusting the parenteral administration in response to the **LDL** profile. The method further includes the step of enhancing tissue penetration of a **cholesterol** acceptor and enhancing extraction of tissue **cholesterol** and other exchangeable material with co-administration of an effective amount of a compound selected from the group consisting of a small acceptor of **cholesterol**, an amphipathic compound, and a **drug** that increases endogenous small acceptors of **cholesterol**.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:210766 HCAPLUS
DOCUMENT NUMBER: 128:275115
TITLE: Nonnaturally occurring receptor-competent **LDL** particle
INVENTOR(S): Halbert, Gavin William; Owens, Moira Doreen; Baillie, George
PATENT ASSIGNEE(S): University of Strathclyde, UK
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9813385	A2	19980402	WO 1997-GB2610	19970925 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2267650	AA	19980402	CA 1997-2267650	19970925 <--
AU 9744667	A1	19980417	AU 1997-44667	19970925 <--
EP 956303	A2	19991117	EP 1997-943050	19970925 <--
R: CH, DE, FR, GB, IT, LI, SE				

JP 2001501206	T2	20010130	JP 1998-515401		19970925 <--
US 2002147304	A1	20021010	US 1999-269533		19990601 <--
US 6670452	B2	20031230			
US 2004235730	A1	20041125	US 2003-657404		20030908 <--
PRIORITY APPLN. INFO.:			GB 1996-20153	A	19960927 <--
			WO 1997-GB2610	W	19970925 <--
			US 1999-269533	A2	19990601 <--

AB A nonnaturally occurring receptor competent **LDL** particle is provided which comprises ≥1 peptide component having at least a binding site for an Apo B protein receptor and ≥1 lipophilic substituent. The particle of the invention has **LDL** receptor competency, but does require the use of substantially whole apo B, which is difficult to to graft onto microemulsion particles. The particle of the invention may be used as a **drug**-targeting vector in the treatment of cancer cells having apo B receptors. The particles may also be used in a cell culture medium as a supplement for cell growth.

L13 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:767624 HCAPLUS
DOCUMENT NUMBER: 128:43960
TITLE: A randomized cross-over study comparing **pharmacodynamic** and metabolic variables of a new combiphasic and a well-established triphasic oral contraceptive
AUTHOR(S): Van Den Ende, A.; Geurts, T. B. P.; Kloosterboer, H. J.
CORPORATE SOURCE: Laboratory of Special Hematology and Hemostasis, Academic Medical Centre, Amsterdam, Neth.
SOURCE: European Journal of Contraception & Reproductive Health Care (**1997**), 2(3), 173-180
CODEN: ECRCFK; ISSN: 1362-5187
PUBLISHER: Parthenon Publishing Group Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In an open-label, randomized, cross-over study in 20 subjects, the short-term effects were investigated of Gracial (DSG/EE 7 + 25/40 μg/day + 15 + 125/30 μg/day) and Trigynon (LNG/EE 6 + 50/30 μg/day + 5 + 75/40 μg/day + 10 + 125/30 μg/day) on plasma concns. of 17β-estradiol and **progesterone** as well as on **carrier** proteins (SHBG, CBG, ceruloplasmin), AT-III, carbohydrate metabolism (insulin, glucose, glycosylated proteins) and lipid metabolism (total **cholesterol**, triglycerides, **phospholipids**, HDL-C, **LDL**-C, HDL2-C, HDL3-C, HDL2-C/HDL3-C ratio, Apo A1, Apo B, Apo A1/Apo B ratio). Both prepns. adequately and similarly inhibited ovulation in all subjects. Serum levels of **carrier** proteins were significantly higher with DSG/EE than with LNG/EE, whereas no between-group differences were observed with respect to fasting glucose and insulin, glycosylated proteins (mainly glycosylated albumin) and AT-III activity. DSG/EE showed significantly higher plasma levels than LNG/EE of estrogen-dependent lipid parameters such as triglycerides, HDL-C, HDL2-C, Apo A1, HDL2-C/HDL3-C ratio and Apo A1/Apo B ratio, whereas the levels of **LDL**-C and Apo B were significantly lower. Both oral contraceptive prepns. were equally effective in suppression of follicular development, but combiphasic DSG/EE induced higher plasma levels of **carrier** proteins and higher plasma levels of potentially anti-atherogenic lipid parameters than did triphasic LNG/EE.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:354033 HCAPLUS
DOCUMENT NUMBER: 126:334373
TITLE: Antiatherogenic liposomal compositions and methods of using them
INVENTOR(S): Williams, Kevin Jon
PATENT ASSIGNEE(S): Williams, Kevin Jon, USA
SOURCE: PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9713501	A1	19970417	WO 1996-US16388	19961011 <--
W: AU, CA, CN, JP, MX, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2231547	AA	19970417	CA 1996-2231547	19961011 <--
AU 9675956	A1	19970430	AU 1996-75956	19961011 <--
AU 759964	B2	20030501		
EP 863748	A1	19980916	EP 1996-938625	19961011 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1228018	A	19990908	CN 1996-198729	19961011 <--
CN 1119145	B	20030827		
US 6080422	A	20000627	US 1996-731256	19961011 <--
JP 2002515856	T2	20020528	JP 1997-515263	19961011 <--
US 2001009670	A1	20010726	US 1998-60611	19980415 <--
US 2002041894	A1	20020411	US 1998-71980	19980504 <--
US 2002064553	A1	20020530	US 1998-164101	19980930 <--
US 2002022053	A1	20020221	US 2001-790232	20010221 <--
US 2002071862	A1	20020613	US 2002-61503	20020131 <--

PRIORITY APPLN. INFO.:		
US 1995-5090P	P	19951011 <--
US 1996-728766	A3	19961011 <--
US 1996-729449	B3	19961011 <--
WO 1996-US16388	W	19961011 <--
US 1998-60642	A1	19980415 <--
US 1998-60644	B3	19980415 <--

AB The present invention provides a liposomal composition, method of using a liposomal composition, and devices and modes of operation of the devices and of the compns., and kits related thereto. The invention provides for the reverse transport of **cholesterol** from peripheral tissues to the liver in a warm blooded mammal while controlling plasma atherogenic lipoprotein concns., including **LDL** concns. The method and mode of operation of the devices includes the step of administering an effective amount of a multiplicity of acceptors comprised of **phospholipids** substantially free of sterol. The method optionally includes the step of periodically assaying atherogenic lipoprotein concns. with an assay during the treatment period to assess atherogenic lipoprotein concns. and obtain an atherogenic lipoprotein profile, and adjusting the administration in response to said profile. The large liposomes are dimensioned larger than fenestrations of an endothelial layer lining hepatic sinusoids in the liver so that the liposomes are too large to readily penetrate the fenestrations of one variant. The **therapeutically** effective amts. are in the range of about 10 mg to about 1600 mg **phospholipid** per kg body weight per dose. A **pharmaceutical** composition and related kit for mobilizing peripheral **cholesterol** and sphingomyelin that enters the liver of a subject consisting essentially of liposomes of a size and shape larger than

fenestrations of an endothelial layer lining hepatic sinusoids in the liver is also provided. The invention also provides for control of **cholesterol** related genes and other compds.

L13 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:15511 HCAPLUS
DOCUMENT NUMBER: 126:65456
TITLE: Microemulsions used as vehicles for carrying **chemotherapeutic** agents to neoplastic cells
INVENTOR(S): Maranhao, Raul C.
PATENT ASSIGNEE(S): Zerbini, Fundacao E. J., Brazil
SOURCE: U.S., 3 pp., Cont. of U.S. Ser. No. 42,105,abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5578583	A	19961126	US 1995-388148	19950213 <--
BR 9201168	A	19940412	BR 1992-1168	19920402 <--
US 5874059	A	19990223	US 1996-688611	19960730 <--
PRIORITY APPLN. INFO.:			US 1993-42105 B1	19930401 <--
			BR 1992-1168 A	19920402 <--
			US 1995-388147 B2	19950213 <--
			US 1995-388148 A	19950213 <--

AB Microemulsions, similar in chemical composition to the lipid portion of low d. lipoprotein (**LDL**), but not containing the protein portion, can be used as vehicles for the delivery of **chemotherapeutic** or diagnostic agents to neoplastic cells, while avoiding normal cells. When these artificial microemulsion particles are injected in the bloodstream or incubated with plasma, they incorporate plasma **apolipoproteins** onto their surface. The microemulsions can then be incorporated into cells via receptors for **LDL** and deliver mols. which are incorporated in the core or at the surface of the microemulsion. For example, the microemulsion was made from a mixture of **phosphatidylcholine** 40, **cholesterol** oleate 20, triolein 1, and **unesterified cholesterol** 0.5 mg. Saline buffer was added to this mixture, which was sonicated and purified by ultracentrifugation. Carmustine was incorporated up to 15 % of the total weight

L13 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:731431 HCAPLUS
DOCUMENT NUMBER: 124:15336
TITLE: Interaction of synthetic discoidal HDL containing an amphipathic peptide and **phosphatidylcholine** with human macrophages
AUTHOR(S): Vuaridel, Evelyne S.; Simon, S. R.
CORPORATE SOURCE: Dep. Biochem., State Univ. New York, Stony Brook, NY, USA
SOURCE: European Journal of Pharmaceutics and Biopharmaceutics (**1995**), 41(2), 94-100
CODEN: EJPBEL; ISSN: 0939-6411
PUBLISHER: Wissenschaftliche Verlagsgesellschaft
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An 18 residue peptide (18A) analog of **apolipoprotein**-AI described by Anantharamaiah with egg lecithin was reconstituted to prepare a

model of nascent discoidal HDL. Particles were prepared by a Na cholate dialysis protocol as described by Matz and Jonas and labeled with I125 or the fluorescent probe 1,1'-dioctadecyl-3,3,3',3'-tetramethylindocarbocyanine. The interaction of these 18A-complexes with human monocyte-derived macrophages was investigated in vitro. Total binding (4°) and uptake (36°) were time- and ligand concentration-dependent. Association of reconstituted complexes with macrophages reached a steady state at 2 h with Kd = 4.5-5.6 + 10-6 M at 4° and Kd = 2.4-8.3 + 10-6 M at 37° as determined either by fluorescence or I125 labeling. Specific association at 37° reached saturation at a concentration of 30 ng 18A/5 + 105 cells and Kd = 1.9 + 10-6 M as determined by fluorescence labeling. **Apolipoprotein** -AI-liposomes effectively competed with the 18A complexes. A 20-fold excess of HDL, **LDL**, and to some extent Ac-**LDL** reduced the association at subsaturating concns. of 18A-complexes with macrophages (37°), according to their **apolipoprotein**-AI content. The values for complex- and liposome-mediated **cholesterol** (I) efflux from macrophages suggest an increased I transport when 18 or **apolipoprotein**-AI were associated with **phospholipids** as **carrier** particles. Confocal light microscopy revealed the accumulation of 18A-complexes in subsurface regions of macrophages, leaving internal regions less occupied.

L13 ANSWER 22 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:546419 HCAPLUS
DOCUMENT NUMBER: 119:146419
TITLE: **Drug** targeting: application of endogenous **carriers** for site-specific delivery of **drugs**
AUTHOR(S): van Berkel, T. J. C.
CORPORATE SOURCE: Sylvius Lab., Univ. Leiden, Leiden, Neth.
SOURCE: Journal of Controlled Release (1993), 24(1-3), 145-55
CODEN: JCREEC; ISSN: 0168-3659
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review with 34 refs.; lipoproteins are endogenous particulate **carriers** responsible for the transport of **cholesterol** and other lipids in the blood circulation. Structurally, they consist of an apolar core, composed of triglycerides and/or **cholesteryl esters**, surrounded by a monolayer of **phospholipids** in which **cholesterol** and **apolipoproteins** are embedded. Being endogenous **carriers**, lipoproteins are not immunogenic and escape recognition by the reticuloendothelial system. Four main lipoprotein classes with characteristic sizes, densities, lipids and apoproteins can be distinguished: chylomicrons, very low d. lipoprotein (VLDL), low d. lipoprotein (**LDL**) and high d. lipoprotein (HDL). Lipoproteins are cleared from the circulation by specific lipoprotein receptors, which recognize the **apolipoproteins.** Chylomicron remnants and a particular type of VLDL, β-VLDL, are rapidly taken up by remnant receptors present on parenchymal liver cells. **LDL** is cleared mainly via specific **LDL** receptors in the liver. In addition, some types of tumor cells show a very high rate of **LDL** uptake. Lipoproteins can also be directed to non-lipoprotein receptors by chemical modification of the **apolipoproteins.** Acetylation of **LDL** induces rapid uptake by scavenger receptors on endothelial liver cells. Lactosylation of **LDL** and HDL induced rapid, galactose-specific uptake by Kupffer and parenchymal liver cells, resp. The oily core of lipoproteins provides an ideal domain for lipophilic

drugs. Some lipophilic compds. incorporate spontaneously into lipoproteins. More hydrophilic **drugs**, however, have to be provided with lipophilic anchors to enable incorporation (**prodrugs**). These (pro)-**drugs** can be incorporated into lipoproteins by aqueous addition, contact methods or reconstitution methods. Because (modified) lipoproteins can be taken up by specific receptors on tumor cells or liver cells they are attractive potential **carriers** of (pro)-**drugs** to these cell types.

L13 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:262521 HCAPLUS
DOCUMENT NUMBER: 116:262521
TITLE: Method for preparing a lipoprotein modified by the incorporation of a lipophilic active substance
INVENTOR(S): Favre, Gilles; Duriez, Patrick; Monard, Francoise; Medhi, Samadi Baboli; Soula, Georges; Fruchart, Jean Charles
PATENT ASSIGNEE(S): Universite Droit et Sante Lille II, Fr.; Universite Paul Sabatier (Toulouse III)
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
WO 9200761	A1	19920123	WO 1991-FR573		19910712	<--
W: AU, CA, JP, US						
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE						
FR 2664500	A1	19920117	FR 1990-8980		19900713	<--
FR 2664500	B1	19941028				
CA 2066416	AA	19920114	CA 1991-2066416		19910712	<--
AU 9182157	A1	19920204	AU 1991-82157		19910712	<--
AU 654144	B2	19941027				
EP 491921	A1	19920701	EP 1991-913037		19910712	<--
EP 491921	B1	19960207				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE						
JP 06500768	T2	19940127	JP 1991-512790		19910712	<--
JP 07086089	B4	19950920				
AT 133867	E	19960215	AT 1991-913037		19910712	<--
US 5324821	A	19940628	US 1992-838444		19920506	<--
PRIORITY APPLN. INFO.:			FR 1990-8980	A	19900713	<--
			WO 1991-FR573	A	19910712	<--

AB A method is provided for preparation of a lipoprotein modified by the incorporation of ≥1 lipophilic substance (other than a triglyceride), e.g. a **drug**. The active substance is incorporated into an emulsion of a lipid phase in an aqueous continuous phase, an initial lipoprotein and ≥1 lipid transfer protein are added to the emulsion, the mixture is incubated, and the active substance-containing lipoprotein is isolated. The modified lipoproteins may be used in **pharmaceutical** or cosmetic compns. Mitoxantrone dilinolenate was incorporated into low-d. lipoprotein (**LDL**) using a com. lipid emulsion (Endolipid); lipoprotein-deficient serum was used as a source of transfer proteins. The modified **LDL** bound to **apolipoprotein**-B and -E receptors of HeLa cells as well as did native **LDL**. The decrease in plasma concentration of the modified **LDL** was close to that for native **LDL**. A modified

LDL containing elliptinium oleate was more cytotoxic to L1210 cells than was elliptinium oleate added alone at the same concentration Formulations of modified LDLs are included.

```
=> d que stat l15
L1        29816 SEA FILE=HCAPLUS ABB=ON  ?APOLIPOPROTEIN? OR ?APOE?
L2         1399 SEA FILE=HCAPLUS ABB=ON  L1 AND (?DRUG?(W)?DELIVER? OR
                ?CARRIER?)
L3          197 SEA FILE=HCAPLUS ABB=ON  L2 AND (?PHOSPHATIDYLCHOLIN? OR
                ?PHOSPHOLIPID?)
L5            1 SEA FILE=REGISTRY ABB=ON  CHOLESTEROL/CN
L6          143 SEA FILE=HCAPLUS ABB=ON  L3 AND (L5 OR ?CHOLESTEROL?)
L7           77 SEA FILE=HCAPLUS ABB=ON  L6 AND (?DRUG? OR ?PHARM? OR ?ANTIBIOT
                IC? OR ?THERAP?)
L9           76 SEA FILE=HCAPLUS ABB=ON  L7 AND ?ESTER?
L10          25 SEA FILE=HCAPLUS ABB=ON  L9 AND LDL
L11          76 SEA FILE=HCAPLUS ABB=ON  L9 OR L10
L12          67 SEA FILE=HCAPLUS ABB=ON  L11 AND (PRD<20021203 OR PD<20021203)
L13          23 SEA FILE=HCAPLUS ABB=ON  L12 AND LDL
L14           9 SEA L13
L15           9 DUP REMOV L14 (0 DUPLICATES REMOVED)

=> d ibib abs l15 1-9

L15  ANSWER 1 OF 9  EMBASE  COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
     on STN
ACCESSION NUMBER:   2000280546  EMBASE
TITLE:              Quantification of human plasma phospholipid
                    transfer protein (PLTP): Relationship between PLTP mass and
                    phospholipid transfer activity.
AUTHOR:             Huuskonen J.; Ekstrom M.; Tahvanainen E.; Vainio A.; Metso
                    J.; Pussinen P.; Ehnholm C.; Olkkonen V.M.; Jauhiainen M.
CORPORATE SOURCE:   M. Jauhiainen, Department of Biochemistry, National Public
                    Health Institute, Mannerheimintie 166, FIN-00300 Helsinki,
                    Finland. matti.jauhiainen@ktl.fi
SOURCE:             Atherosclerosis, (2000) 151/2 (451-461).
                    Refs: 44
                    ISSN: 0021-9150  CODEN: ATHSBL
PUBLISHER IDENT.:   S 0021-9150(99)00429-3
COUNTRY:            Ireland
DOCUMENT TYPE:      Journal; Article
FILE SEGMENT:       017     Public Health, Social Medicine and Epidemiology
                    018     Cardiovascular Diseases and Cardiovascular Surgery
                    029     Clinical Biochemistry
LANGUAGE:           English
SUMMARY LANGUAGE:   English
AB   A sensitive sandwich-type enzyme-linked immunosorbent assay (ELISA) for
     human plasma phospholipid transfer protein (PLTP) has been
     developed using a monoclonal capture antibody and a polyclonal detection
     antibody. The ELISA allows for the accurate quantification of PLTP in the
     range of 25-250 ng PLTP/assay. Using the ELISA, the mean plasma PLTP
     concentration in a Finnish population sample (n = 159) was determined to
     be 15.6 ± 5.1 mg/l, the values ranging from 2.30 to 33.4 mg/l. PLTP
     mass correlated positively with HDL- cholesterol (r = 0.36, P <
     0.001), apoA-I (r = 0.37, P < 0.001), apoA-II (r = 0.20, P < 0.05),
     Lp(A-I) (r = 0.26, P = 0.001) and Lp(A-I/A-II) particles (r = 0.34, P <
     0.001), and negatively with body mass index (BMI) (r = -0.28, P < 0.001)
     and serum triacylglycerol (TG) concentration (r = -0.34, P < 0.001). PLTP
     mass did not correlate with phospholipid transfer activity as
     measured with a radiometric assay. The specific activity of PLTP, i.e.
     phospholipid transfer activity divided by PLTP mass, correlated
     positively with plasma TG concentration (r = 0.568, P < 0.001), BMI (r =
     0.45, P < 0.001), apoB (r = 0.45, P < 0.001), total cholesterol
     (r = 0.42, P < 0.001), LDL-cholesterol (r = 0.34, P <
```

0.001) and age (r = 0.36, P < 0.001), and negatively with HDL-**cholesterol** (r = -0.33, P < 0.001), Lp(A-I) (r = -0.21, P < 0.01) as well as Lp(A-I/A-II) particles (r = -0.32, P < 0.001). When both PLTP mass and **phospholipid** transfer activity were adjusted for plasma TG concentration, a significant positive correlation was revealed (partial correlation, r = 0.31, P < 0.001). The results suggest that PLTP mass and **phospholipid** transfer activity are strongly modulated by plasma lipoprotein composition: PLTP mass correlates positively with parameters reflecting plasma high density lipoprotein (HDL) levels, but the protein appears to be most active in subjects displaying high TG concentration. (C) 2000 Elsevier Science Ireland Ltd.

L15 ANSWER 2 OF 9 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 1999357470 EMBASE
TITLE: Antiproliferative efficacy of lipophilic soy isoflavone phytoestrogens delivered by low density lipoprotein particles into cultured U937 cells.
AUTHOR: Meng Q.-H.; Wahala K.; Adlercreutz H.; Tikkanen M.J.
CORPORATE SOURCE: Prof. M.J. Tikkanen, Department of Medicine, Helsinki Univ. Central Hospital, Haartmaninkatu 4, 00290 Helsinki, Finland. matti.j.tikkanen@helsinki.fi
SOURCE: Life Sciences, (10 Sep 1999) 65/16 (1695-1705).
Refs: 39
ISSN: 0024-3205 CODEN: LIFSAK
PUBLISHER IDENT.: S 0024-3205(99)00418-X
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Some fat-soluble bioactive substances incorporated into low density lipoprotein (**LDL**) may be delivered into cells via **LDL** receptor pathway influencing cellular functions. In this study, we synthesized a number of fat-soluble isoflavone **esters** and investigated their incorporation into **LDL** as well as their delivery into U937 cells. Using an artificial transfer system (Celite dispersion), genistein and daidzein oleates and daidzein dilinoleate were efficiently incorporated into **LDL** with concentrations ranging between 2.7 to 16.9 isoflavone molecules/**LDL** particle, while much smaller amounts of **unesterified** isoflavones and genistein stearates were transferred into **LDL**. **LDL** containing 7-oleates or 4',7-dioleates of genistein and daidzein significantly reduced U937 cell proliferation by 36-43%. The strongest inhibitory effect was shown by daidzein 4',7-dilinoleate with 93% reduction of cell proliferation. Neither of the 4'-oleates of genistein and daidzein contained in LDLs exhibited antiproliferative effects although they were incorporated into **LDL**. In summary, we demonstrated that isoflavones made fat-soluble by **esterification** can be incorporated into **LDL** in vitro and delivered into cultured U937 cells via the **LDL**-receptor pathway, reducing the cell proliferation.

L15 ANSWER 3 OF 9 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 1999342937 EMBASE
TITLE: Distribution of PCB congeners, DDE, hexachlorobenzene, and methylsulfonyl metabolites of PCB and DDE among various

fractions of human blood plasma.
AUTHOR: Noren K.; Weistrand C.; Karpe F.
CORPORATE SOURCE: K. Noren, Dept. of Med. Biochem./Biophysics, Karolinska Institutet, S-171 77 Stockholm, Sweden
SOURCE: Archives of Environmental Contamination and Toxicology, (**1999**) 37/3 (408-414).
Refs: 38
ISSN: 0090-4341 CODEN: AECTCV
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 046 Environmental Health and Pollution Control
052 Toxicology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The concentrations of chlorinated biphenyls (CBs), 1,1-bis(4-chlorophenyl)-2,2-dichloroethene (DDE), hexachlorobenzene (HCB), and the methylsulfonyl metabolites of CBs (MeSO2-CBs) and DDE (MeSO2-DDE) were determined in human plasma samples and in the fractions obtained by ultracentrifugation of plasma into very-low-density (VLDL), low-density (**LDL**), high-density (HDL) lipoprotein and lipoprotein depleted (LPDP) fractions (containing primarily albumin). The concentrations of triacylglycerols, **cholesterol**, **phospholipids**, and **apolipoprotein** B (apoB) were determined. The organochlorine compounds were associated with all fractions, but predominantly with the LPDP fraction. On an average 44% of CBs, 61% of MeSO2-CBs, 73% of DDE, 77% of MeSO2-DDE, and 45% of HCB were distributed in the LPDP fraction. A tendency to greater association of 3- methylsulfonyl substituted than of corresponding 4-methylsulfonyl substituted chlorobiphenyls to the LPDP fraction was noticed. Among the lipoprotein fractions, **LDL** was the main **carrier** of HCB, DDE and CBs. MeSO2-DDE was predominantly found in HDL and MeSO2CBs were distributed equally among the **LDL** and HDL fractions. Calculating the concentrations of organochlorine compounds in relation to the content of apoB, the levels were about 10 times higher in VLDL than in **LDL**.

L15 ANSWER 4 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation. on STN
ACCESSION NUMBER: 1996:526440 BIOSIS
DOCUMENT NUMBER: PREV199699248796
TITLE: Selective inhibition of free **apolipoprotein** -mediated cellular lipid efflux by probucol.
AUTHOR(S): Tsujita, Maki; Yokoyama, Shinji [Reprint author]
CORPORATE SOURCE: Biochem. 1, Nagoya City Univ. Med. Sch., Kawasumi 1, Mizuho-ku, Nagoya 467, Japan
SOURCE: Biochemistry, (**1996**) Vol. 35, No. 40, pp. 13011-13020.
CODEN: BICHAW. ISSN: 0006-2960.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Nov 1996
Last Updated on STN: 23 Nov 1996

AB We attempted to demonstrate selective modulation of lipid-free **apolipoprotein**-mediated cellular lipid efflux in order to test the hypothesis that it is an event independent of nonspecific physicochemical **cholesterol** exchange. Probucol, a unique **cholesterol** -lowering **drug**, was found to selectively suppress this pathway in vitro in mouse peritoneal macrophage. Probucol was given to the cells via the uptake of acetylated low-density lipoprotein (**LDL**) into which it had been incorporated. The uptake of lipoprotein-**cholesteryl ester** by the macrophage was the same whether the acetylated **LDL** was probucol-carrying or probucol-free, and

probucol accumulated in the cell in parallel to **cholesterol** when carried by the lipoprotein. Incorporation of (35S)methionine into cell protein was unaffected by probucol accumulated in the cells. The efflux of cellular **cholesterol** and **phospholipid** mediated by lipid-free human **apolipoproteins** (apo) A-I, A-II, and E was all completely inhibited by probucol. Reversible binding of free apoA-I to the cellular surface was also completely blocked by probucol in this condition. On the other hand, nonspecific **cholesterol** exchange between **LDL** and macrophage was unaffected by probucol. Thus, probucol selectively inhibited **apolipoprotein**-mediated cellular lipid efflux by blocking specific binding of free **apolipoprotein** to the cell without influencing nonspecific lipid exchange. In the absence of lecithin: **cholesterol** acyltransferase (LCAT) reaction, apparent cellular **cholesterol** efflux to high-density lipoprotein (HDL) was reduced by probucol by 40-70% while the rate of **cholesterol** influx from HDL to the cells was unaffected, resulting in cancellation of the net cellular **cholesterol** efflux to HDL. However, the increase of the net **cholesterol** efflux to HDL by LCAT was unaffected by probucol. Net cellular **cholesterol** efflux to HDL in the absence of LCAT, therefore, seems to depend on an **apolipoprotein**-mediated mechanism.

L15 ANSWER 5 OF 9 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 95049938 EMBASE
DOCUMENT NUMBER: 1995049938
TITLE: Characterization of native and **drug**-loaded human low density lipoproteins.
AUTHOR: Westesen K.; Gerke A.; Koch M.H.J.
CORPORATE SOURCE: IPT der TU Braunschweig, Mendelssohnstr. 1,D-38106 Braunschweig, Germany
SOURCE: Journal of Pharmaceutical Sciences, (1995) 84/2 (139-147).
ISSN: 0022-3549 CODEN: JPMSAE
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Low-density lipoproteins (LDLs), the physiological vehicles for lipids, are potentially useful **drug delivery** devises for (hydrophobic) **drugs**. The physicochemical characteristics of **LDL** loaded with the adriamycin derivative AD 32 or the N-mustard derivative WB 4291 were compared to that of native and reconstituted **LDL** at different temperatures. X-ray solution scattering indicates that loading with AD 32 has no detectable effect on the particle structure at room temperature, in contrast to WB 4291. According to 19F NMR data, AD 32 molecules are located in two distinct chemical environments with restricted motional freedom of the CF3 groups in samples stored as lyophilisates. 1H NMR signals from AD 32 were not observed, while those from WB 4291 could be distinguished from those of **LDL** constituents. WB 4291 molecules are in an environment with a higher motional freedom than AD 32 molecules. 1H NMR data suggest a higher fluidity of the core components for the WB-loaded LDLs compared to the other **LDL** preparations. While the motional freedom of the **phospholipid** heed groups seems to be temperature independent, there is an increase in the mobility of the lipid components in the core region of the **LDL** particles with temperature.

L15 ANSWER 6 OF 9 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 95146639 EMBASE
DOCUMENT NUMBER: 1995146639
TITLE: Interaction of synthetic discoidal HDL containing an amphipathic peptide and **phosphatidylcholine** with human macrophages.
AUTHOR: Vuaridel E.S.; Simon S.R.
CORPORATE SOURCE: Pharmapeptides Campus Universitaire, Parc d'Affaires International,F-74166 Archamps, France
SOURCE: European Journal of Pharmaceutics and Biopharmaceutics, (**1995**) 41/2 (94-100).
ISSN: 0939-6411 CODEN: EJPBEL
COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We have reconstituted an 18 residue peptide (18A) analogue of **apolipoprotein**-AI described by Anantharamaiah (1) with egg lecithin to prepare a model of nascent discoidal HDL. Particles were prepared by a sodium cholate dialysis protocol as described by Matz and Jonas (2) and labelled with I125 or the fluorescent probe 1,1'-dioctadecyl-3,3,3',3'-tetramethylindocarbocyanine. The interaction of these 18A-complexes with human monocyte-derived macrophages was investigated in vitro. Total binding (4°C) and uptake (37°C) were time- and ligand concentration-dependent. Association of reconstituted complexes with macrophages reached a steady state at 2 h with Kd = 4.5-5.6 x 10-6 M at 4°C and Kd = 2.4-8.3 x 10-6 M at 37 °C as determined either by fluorescence or I135 labelling. Specific association at 37°C reached saturation at a concentration of 30 ng 18A/5 x 105 cells and Kd = 1.9 x 10-6 M as determined by fluorescence labelling. **Apolipoprotein**-AI-liposomes effectively competed with the 18A-complexes. A 20-fold excess of HDL, **LDL** and to some extent Ac-**LDL** reduced the association at subsaturating concentrations of 18A-complexes with macrophages (37°C), according to their **apolipoprotein**-AI content. The values for complex- and liposome-mediated **cholesterol** efflux from macrophages suggest an increased **cholesterol** transport when 18A or **apolipoprotein**-AI were associated with **phospholipids** as **carrier** particles. Confocal light microscopy revealed the accumulation of 18A-complexes in subsurface regions of macrophages, leaving internal regions less occupied.

L15 ANSWER 7 OF 9 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 93241447 EMBASE
DOCUMENT NUMBER: 1993241447
TITLE: Metabolic behavior in rats of a nonprotein microemulsion resembling low- density lipoprotein.
AUTHOR: Maranhao R.C.; Cesar T.B.; Pedroso-Mariani S.R.; Hirata M.H.; Mesquita C.H.
CORPORATE SOURCE: Faculdade de Ciencias Farmaceuticas, USP, Av. Dr. Lineu Prestes 580,Sao Paulo, SP 05508-900, Brazil
SOURCE: Lipids, (**1993**) 28/8 (691-696).
ISSN: 0024-4201 CODEN: LPDSAP
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry

037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB A protein-free microemulsion (LDE) with a lipid composition resembling that of low-density lipoprotein (**LDL**) was used in metabolic studies in rats to compare LDE with the native lipoprotein. LDE labeled with radioactive lipids was injected into the bloodstream of male Wistar rats, and plasma kinetics of the labeled lipids were followed on plasma samples collected at regular intervals for 12 h after injection. The 24-h LDE uptake by different tissues was also measured in tissue samples excised after the animals had been sacrificed. We found that LDE plasma kinetics were similar to those described for native **LDL** [fractional clearance rate (FCR) of **cholesteryl ester**, 0.42 ± 0.11 h-1]. The major site for LDE uptake was the liver, and the tissue distribution of the LDE injected radioactivity was as one would expect for **LDL**. To test whether LDE was taken up by the specific **LDL** receptors, the LDE emulsion was injected into rats treated with 17α- ethinylestradiol, which is known to increase the activity of these receptors; as expected, removal of LDE from the bloodstream increased (FCR = 0.90 ± 0.35 h-1). On the other hand, saturation of the receptors that remove remnants by prior infusion of massive amounts of lymph chylomicrons did not change LDE plasma kinetics. These results indicate that LDE is cleared from plasma by B,E receptors and not by the E receptors that remove remnants. Incorporation of free **cholesterol** into LDE increased LDE plasma clearance. Incubation studies also showed that LDE incorporates a variety of **apolipoproteins**, including apo E, a ligand for recognition of lipoproteins by specific receptors. Our data suggest that LDE can be a useful tool to test **LDL** metabolism and B,E receptor function.

L15 ANSWER 8 OF 9 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 93161341 EMBASE
DOCUMENT NUMBER: 1993161341
TITLE: **Drug** targeting: Application of endogenous **carriers** for site-specific delivery of **drugs.**
AUTHOR: Van Berkel Th. J.C.
CORPORATE SOURCE: Division of Biopharmaceutics, Center for Bio-Pharmaceutical Sci., Sylvius Lab., University of Leiden,Leiden, Netherlands
SOURCE: Journal of Controlled Release, (**1993**) 24/1-3 (145-155).
ISSN: 0168-3659 CODEN: JCREEC
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 004 Microbiology
016 Cancer
023 Nuclear Medicine
027 Biophysics, Bioengineering and Medical Instrumentation
048 Gastroenterology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Lipoproteins are endogenous particulate **carriers** responsible for the transport of **cholesterol** and other lipids in the blood circulation. Structurally, they consist of an apolar core, composed of triglycerides and/or **cholesteryl esters**, surrounded by

a monolayer of **phospholipids** in which **cholesterol** and **apolipoproteins** are embedded. Being endogenous **carriers**, lipoproteins are not immunogenic and escape recognition by the reticulo-endothelial system. Four main lipoprotein classes with characteristic sizes, densities, lipids and apoproteins can be distinguished: chylomicrons, very low density lipoprotein (VLDL), low density lipoprotein (**LDL**) and high density lipoprotein (HDL). Lipoproteins are cleared from the circulation by specific lipoprotein receptors, wich recognize the **apolipoproteins.** Chylomicron remnants and a particular type of VLDL, β-VLDL, are rapidly taken up by remnant receptors present on parenchymal liver cells. **LDL** is cleared mainly via specific **LDL** receptors in the liver. In addition, some types of tumor cells show a very high rate of **LDL** uptake. Lipoproteins can also be directed to non-lipoprotein receptors by chemical modification of the **apolipoproteins.** Acetylation of **LDL** induces rapid uptake by scavenger receptors on endothelial liver cells. Lactosylation of **LDL** and HDL induced rapid, galactose-specific uptake by Kupffer and parenchymal liver cells, respectively. The oily core of lipoproteins provides an ideal domain for lipophilic **drugs.** Some lipophilic compounds incorporate spontaneously into lipoproteins. More hydrophilic **drugs**, however, have to be provided with lipophilic anchors to enable incorporation (**prodrugs**). These (pro)-**drugs** can be incorporated into lipoproteins by aqueous addition, contact methods or reconstitution methods. Because (modified) lipoproteins can be taken up by specific receptors on tumor cells or liver cells they are attractive potential **carriers** of (pro)-**drugs** to these cell types.

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AB Lipoproteins are endogenous particulate **carriers** responsible for the transport of **cholesterol** and other lipids in the blood circulation. Structurally, they consist of an apolar core, composed of triglycerides and/or **cholesteryl esters**, surrounded by a monolayer of **phospholipids** in which **cholesterol** and **apolipoproteins** are embedded. Being endogenous **carriers** lipoproteins are not immunogenic and escape recognition by the reticuloendothelial system. Four main lipoprotein classes with characteristic sizes, densities, lipids and apoproteins can be distinguished: chylomicrons, very-low-density lipoprotein (VLDL),

low-density lipoprotein (**LDL**) and high-density lipoprotein (HDL). Lipoproteins are cleared from the circulation by specific lipo-protein receptors, which recognize the **apolipoproteins.** Chylomicron remnants and a particular type of VLDL, β-VLDL, are rapidly taken up by remnant receptors present on parenchymal liver cells. **LDL** is cleared mainly via specific **LDL** receptors in the liver. In addition, some types of tumor cells show a very high rate of **LDL** uptake. Lipoproteins can also be directed to non-lipoprotein receptors by chemical modification of the **apolipoproteins.** Acetylation of **LDL** induces rapid uptake by scavenger receptors on endothelial liver cells. Lactosylation of **LDL** and HDL induces rapid, galactose-specific uptake by Kupffer and parenchymal liver cells, respectively. The oily core of lipoproteins provides an ideal domain for lipophilic **drugs.** Some lipophilic compounds incorporate spontaneously into lipoproteins. More hydrophilic **drugs**, however, have to be provided with lipophilic anchors to enable incorporation (**prodrugs**). These (pro)**drugs** can be incorporated into lipoproteins by aqueous addition, contact methods, or reconstitution methods. Because (modified) lipoproteins can be taken up by specific receptors on tumor cells or liver cells they are attractive potential **carriers** of (pro)**drugs** to these cell types.